WA Technology

Nylon Bra for C6, 2014 C7 and 2017 Grand Sport w/Stage 3 Winglets

Car Bras provide protection from debris and the bugs we have in the South! When using the Vette around home, when I return, Bug and Tar Spray is used to remove the splats! However, for a longer trip, at certain times of the year, cleaning the bugs can be a real messy job and they also get in the grill, condenser and radiator.

Having heard issues about abrasion and difficulty with conventional Vinyl Bras, installed a Nylon Bra on my C6 and it worked great. Decided to install one on the C7 and find a way to install the same bra on my Stage Grand Sport with a G Stage 2 aero package that I had installed 5-inch wider Stage 3 winglets.

The following are pictures of the C7 installation of a NoviStretch Bra:

This is a picture of the Nylon Bra Installed on the C6. Worked great and never saw any problems related to abrasion. However, I only used it on long trips and if it was dusty during the trip, in addition to cleaning the car carefully before installing the Bra, cleaned it when I arrived at my destination before returning home. It comes off and on easily



Bought this NoviStretch Bra from RPI Designs. Ordered on a weekend and it arrived on Wednesday! Great service. It is a high-quality product and comes complete with one page of instructions (pic right) and the required screw snaps. However, the pictures shown in the instructions are hard to see. In addition, I made some modifications that will be pointed out here with pics.

You may or may not want to add these extras.



Removing the OEM screws requires a T-15 Torx wrench. I have both a quality T-15 screw driver and a quality T-15 socket that fits a ¼ inch drive.

Buy a quality tool as I finally had to do to complete a task!

We'll start with the bigger challenge, installing on a Grand Sport with Stage 2 splitter and Stage 3 Winglets



The OEM Stage 2 aero package includes carbon fiber full length side skirts and splitter. Mine are painted carbon flash. To better blend with the Grand Sports spats installed Stage 3 winglets. They are 2 ½ inch wider per side so 5 inches overall, particularly at the bottom.

Overall fit is fine!





The challenge was to get the NoviStretch Bra to stretch at the bottom snaps.

Removed the three screws from the front inner fender liner. Instead of normal screws for the Stage 3 winglets, I purchased 1 inch long #10 stainless male snaps from Harvard Marine (bottom of pic) and used two different size washers.





These are the three snaps used to hold the Stage 3 winglets. They are recessed but there is room for the male snap on the bra.

For the lower snaps, the bra must stretch about 4 to 5 inches more, making it very tight. Bought 1 ½ inch snap extensions. They are also sold by Harvard Marine for boat covers that shirk over time!

Found it was easier to put the snap extension on the car then snapped the lower bra female snap onto it.





Once the sides are snapped the top right side loop was attached to a protrusion on the right side. No need to remove the plastic section as defined in the instructions.

The left (driver's) side had no such protrusion to slip the bra loop over. Would have to remove the plastic cover, but a quick try showed it was not as easy as on the C6.

Will consider bolting a 2" X 2" piece of black plastic to the right side plastic part to make it easy to connect that loop.



Drilled a pilot hole into the "Splitter Protector" I recently added. See last page for a link to that product and install.

This is the male snap screwed into the protector. In the 2014 C7 was just screwing into plastic so was concerned about the holding power of a snap screw. With the plastic protector was not an issue as it is about 3/16 inches thick. After snapping the left side bra snap, marked drilled and put in the right-side screw.



Install on C7 Stingray:

Did not have to jack-up the car. As recommended in Step 2 of the printed instructions, turned the wheel to gain access. As mentioned in Step 3 removed and replaced each screw with a snap only one at a time to keep the inner fender aligned.

Don't remove all 3 at once! Had sufficient room to use the Torx screw driver but the ratchet and socket gave more leverage to press in, if needed- it wasn't.



The OEM screw includes a captive washer. The supplied snaps do not. Since the fender liner is only plastic decided to remove the OEM washers and put them on the supplied snap.

May not be necessary but thought that would be desirable.

CAUTION:

All screws are going into plastic or Sheet Molding Compound so do not over tighten or you'll strip the plastic!



To remove the captive washer I used a 7/16 inch socket and a vice (see pic). Be careful as quite a bit of force is needed and the alignment must be good or the assembly will slip. Cover with a rag as you tighten the vise so if it slips it doesn't hit you!



The washer will deform slightly but one blow from a hammer on the vise anvil quickly flattened it. It slipped over the supplied snap without having to ream out the hole.



With all screw snaps in place, snap the Bra in place on one side then the other. It will require pulling but that is how it should fit (see pic.)

Once installed, pull down the bottom and tuck it under the bumper. There are two snaps that need to replace two of the bumper screws. It is obvious which screws but they are the third from each end. These are longer screws and removing the captive washers is not easy! Decided to use small stainless fender washers rather than removing the captive washer. Since they can't be seen, that was a good solution. The instructions do not indicate washers are needed.



Step 7 may appear confusing until you read the text and then look at this picture. The outside bottom corners will not stay on the edge of the bumper. As noted in the instructions, this next step is optional but recommended. The instructions indicate the bolt that holds the outer edge of the air dam just be loosened to provide a gap for the Bra to fit into. I found it required several turns to provide the needed gap. I was concerned the screw could work loose, especially when not using the Bra..



My solution was to use 3 Stainless fender washers per side as a spacer so the screw could be tightened after they were installed.

Your choice, you may elect to skip this step entirely.



If you decide to use this option then you'll need a 7 mm socket. You are simply unscrewing the bolt that holds the corner of the air dam and if you use my approach, place the spacer (it measured 5/32 thick) and put the screw back and tighten.

As will all screws "Do Not Over Tighten."



This a picture of the stacked Stainless fender washers that create the gap. It is a long bolt with sufficient thread to hold tight. This space was sufficient to have the Bra fit in the gap.



This is a picture with the Bra corner inserted into the gap between the bumper and the air dam. Looks like it will hold fine. Will must see how well it holds at high speed.



Steps 8 & 9 are the most difficult to follow until you see these pictures. With the hood open the instructions state to remove the "Plastic Cover" that is held in place with friction clips. This pic is a paper towel roll placed under one edge of the "Plastic Cover" to make it visible.



The "Plastic Cover" referred to actually removes easily, no tools needed. You can see it here resting on the fender.



This is the driver's side with the "Plastic Cover" removed and the referenced "Frame" (noted in the instructions) exposed. That "Frame" is where you'll attach the loops that are on the ends of the Bra.



This is a Bra loop placed over the passenger side "Frame."

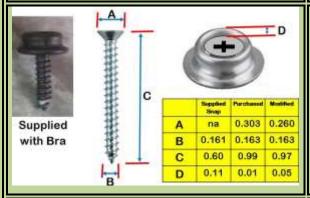


Although not mentioned in the Instructions, I was able to place the "Plastic Cover" back over the Bra loop. It does fit in with friction as noted in the instructions. Note on the passenger side there is a cable that fits over it and helps it stay in place. Since I will only be using the Bra for long trips I might leave them off until I remove the Bra



Here is a Pic with everything in place, it fits perfectly.





After installing a carbon fiber Splitter, we found the Nylon Bra stretched over the splitter as well! It did not fit in the gap between the Air Dam and body so it was left loose. However, we found we needed a 1 inch long screw for the snap. We made one but they can be purchased. Try Amazon.

This is a pic on the Bra installed over the Splitter. It fits very well and snaps just as easily as before the Splitter was installed. For details on how it fit and when we located the snaps see the PDF of the Splitter install by scrolling through the following info on all the mods or info provided about the C7.



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Other 2017 Grand Sport & 2014 Stingray PDF's Available:



Some 40 items discuss improvements or information about a 2017 Grand Sport and 2014 Stingray function and/or esthetics. Some are minor and others, like the installing ceramic brake pads, include detailed install information.

Below are the PDF's available. Click on picture (may need Ctrl pressed.) Or just copy and paste the PDF info (Blue type) into your browser. Or email me at GUttrachi@aol.com and state the title desired, shown in Yellow:

Note: GS indicates the info was updated from that available for the C7 Z51 PDFs.

Rusty GS/C7 Muffler

Why the C7 muffler is rusted and a simply way to make rust turn matte black.

Bottom pic rusted, top pic treated

http://netwelding.com/Muffler_Rust.pdf

Change GS/C7 Oil

WHY change your own oil and HOW to do it
Revised, includes C7 Lifting Methods
http://netwelding.com/Changing_Oil.pdf

C7 Carbon Fiber Side Skirts

How to install side skirts with jacking information for DIY's without lifts

http://netwelding.com/Side_Skirts.pdf

C7 Carbon Fiber Splitter w/End Plates

How to install Splitter & Nylon bra fit http://netwelding.com/CF_Splitter.pdf

C7 Removing GM Plastic Film

How To Remove The Rocker Panel Film http://netwelding.com/Rocker_Panel_Film.pdf











GS/C7 Mirror Proximity Alarm

Limit switch alarm warns when passenger mirror is too close to door frame

http://netwelding.com/Mirror_Proximity_Alarm.pdf



Jacking Pads for GS/C7

Jacking Pads must 2 1/2 inch max OD. Made four. Bought 2 1/2 inch OD x 2 inch high pads after installing side skirts; Bought pads right for the GS.

http://netwelding.com/Jacking_pads.pdf



GS/C7 Radar Power

For C7 tapped rear fuse panel. For GS tapped mirrow

http://netwelding.com/Radar_Detector_Power.pdf



GS/C7 Belt Rattle

Passenger seat belt rattles against the seat back. The solution, add a shoulder belt pad.

http://netwelding.com/Eliminate_Rattle.pdf



Aluminum C7 Chassis and Weld Repair

The C7 has an all aluminum chassis, made from 117 welded pieces

http://netwelding.com/Aluminum_Chassis.pdf



GS/C7Ceramic Brake Pads

The Z51 has very dusty brakes. These pads help!

http://netwelding.com/Ceramic_Pads.pdf



GS/C7 License Plate Frame;

Must Meet South Carolina Law

http://netwelding.com/License_Plate_Frame.pdf



Manage GS/C7 Spilled Gas

Protect the side of the Vette when filling up with gas

http://netwelding.com/Manage_Spilled_Gas.pdf



GS/C7 License Plate & Cargo Lights

LED license plate light & cargo area bulbs are brighter and whiter

http://netwelding.com/License_Plate_Light.pdf



GS/C7 Rear Cargo Area

Rear cargo area needs storage device and rear protector

http://netwelding.com/Rear_Cargo_Area.pdf



GS/C7 Door Panel Protector

Black plastic protector added to prevent scuffing of door when exiting

http://netwelding.com/Door_Panel_Protector.pdf



GS/C7 Improved Cup Holder

A solution to the cup holder spilling under hard braking or shape turns.

http://netwelding.com/Improved_cup_Holder.pdf



GS/C7 Wheel Chatter/Hop

Why sharp, low speed turns with cold tires causes the front tires to chatter/hop.

http://netwelding.com/Wheel_Chatter.pdf



C7 Carbon Fiber Grille Bar

Install genuine carbon fiber grille bar overlay http://netwelding.com/CF_Grille_Bar.pdf



Jacking a GS/C7 Vette

Safely jacking either front only or back & front http://netwelding.com/Jacking_A_C7.pdf



Deer Whistle Installed on GS/C7

Do they work? Plus Install Info http://netwelding.com/Deer_Whistle.pdf



Replacing C7 Battery

After using a GM type charger and showing fully charged a voltage low, replaced battery with AGM!

http://netwelding.com/Battery_Issues.pdf



GS/C7 Window Valet

Lower Windows with FOB
Window Valet Helps 2014/2015 Latch Hatch
http://netwelding.com/Hatch_Latch.pdf



GS/C7 Splash Guards

GM offers splash guards for the C7 Corvette. An easy DIY installation. ACS Best Front Guards for GS.

http://netwelding.com/Splash_Guard.pdf



GS/C7 Blind Spot Mirror

Smaller rear and side windows cause C7 blind spots.

Small "blind spot mirrors" help

http://netwelding.com/Blind_Spot.pdf

GS/C7 Skid Pad Protector

After the air dam, the aluminum "skid pad" hits driveway ramps etc. Plastic protector helps.

http://netwelding.com/Skid_Pad_Protector.pdf

GS/C7 Wheel Locks

Wheel locks, torqued to required 100 ft-lbs, help protect your expensive wheels from theft.

http://netwelding.com/Wheel_Locks.pdf

GS/C7 OnStar Lights

The OnStar LED's in the rear view mirror, at a quick glance, look like a police car flashing light! This is a fix.

http://netwelding.com/OnStar_Lights.pdf

GS/C7 Skip Shift Eliminator

Skip Shift Eliminator install with suggestions on jacking a C7.

http://netwelding.com/Skip_shift_Eliminator.pdf

C7 Catch Can & Clean Oil Separator

Direct inject engines like the LT1, are particularly subject to "coking." What is Coking and how to reduce the potential?

http://netwelding.com/Catch_Can.pdf

GS/C7 Round Shift Knob

A round shift knob shortens throw.

http://netwelding.com/Shift_Knob.pdf

GS/C7 Stingray Sill Plate

Stingray sill plate replaces original.

http://netwelding.com/Sill_Plate.pdf

GS/C7 Nylon Bra

Nylon Bra Stops Bugs on Front and Grill. Fits with Stage 3 Winglets

http://netwelding.com/Nylon_Bra.pdf













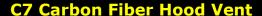






GS/C7 Clutch Fluid Change

Clutch fluid after 3000 miles gets dirty http://netwelding.com/Clutch_Fluid.pdf



Replaces Plastic Hood Vent

http://netwelding.com/Hood_Vent.pdf

GS/C7 Cold Air Intake

Low Restriction Air Filter & Duct

http://netwelding.com/Cold_Air_Intake.pdf

Garmin GPS for GS Cubby

Garmin Mounts in GS Cubby

http://netwelding.com/GPS_In_Cubby.pdf

GS Splitter Stage 3 Winglet

Stage 3 Winglets Integrate with Spats

http://netwelding.com/Stage_3_Winglets.pdf

GS 2LT to 2.5 LT

Red Upper Dash Pad Like 3LT

http://netwelding.com/Red_Dash_Pad.pdf

Jake Emblem/Decals for GS

Jake Symbols Support GS Racing Image

http://netwelding.com/Jake_Emblems.pdf

GS Splitter Protector

Rugged Plastic Protection for Splitter

http://netwelding.com/Splitter_Protectors.pdf

GS: Vitesse Throttle Controller

Adjustable Throttle-by-Wire Control

http://netwelding.com/Throttle_Control.pdf

May Be Of Interest:

Engineering a ProStreet Rod

How Our '34 ProStreet Rod Was Designed and Built 8.2 Liter Engine, 4 Wheel Disk Brakes & Coilovers

http://netwelding.com/Engineering%20Street%20R od%203-08.pdf



















